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R E M A R K S

Claims 1-15 were considered in the Office Action. Claims 1-4 and 12-15 stand rejected under 35 U.S.C. 102(b) as being anticipated by Jaquette et al., U.S. Patent 5,790,491

5 (hereinafter Jaquette). Claims 5-9 and 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Jaquette in view of Sasaki et al., U.S. Patent 4,831,611. It is noted that although the Office Action Summary indicates that claim 10 is also rejected, no specific rejection is given for claim 10 in the body of the Office Action mailed October 9, 2003.

10 The Applicants believe that the currently pending claims are not anticipated by or obvious over the cited references. Applicants respectfully request reconsideration.

Claim rejections - 35 U.S.C. 102

15 Claims 1-4 and 12-15 stand rejected under 35 U.S.C. 102(b) as being anticipated by Jaquette et al., U.S. Patent 5,790,491. The Applicants believe that the currently pending claims are allowable over Jaquette due to at least the highlighted differences in the independent claims below:

20 1. An apparatus comprising:

optics adapted for focusing on a layer of an information storage media;

25 a symmetrical optical pulse generator, coupled with the layer through the optics, for generating a train of optical pulses, wherein each pulse is substantially symmetrical and has a respective temporal placement within the train and has a respective pulse duration;

a generator of an analog duration control voltage having a variable voltage amount, coupled with the optical pulse

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generator for varying the respective pulse duration of each substantially symmetrical pulse in accordance with the variable voltage amount.

12. A method comprising:

5 providing optics adapted for focusing on a layer of an information storage media and a symmetrical optical pulse generator, coupled with the layer through the optics;

generating a train of optical pulses, wherein each pulse is substantially symmetrical and has a respective temporal placement within the train and has a respective pulse duration;

10 generating an analog duration control voltage having a variable voltage amount for varying the respective pulse duration of each substantially symmetrical pulse in accordance with the variable voltage amount.

Claims 1 and 12 both require an analog duration control voltage for varying the pulse duration in accordance with the variable voltage amount. The Office Action mailed October 9, 2003 refers to the analog signal provided by Jaquette's digital-to-analog converter DAC (23), indicating that it establishes "the pulse intensity and modulation".

Applicants respectfully disagree that the signal from Jaquette's DAC 23 discloses or suggests an **analog duration control voltage** for varying the pulse duration in accordance with the variable voltage amount. Jaquette discloses that "DAC 23 supplies an analog signal to laser control 15 for determining the recording beam **intensity** emitted by laser 14 to optics 11." (Jaquette, col. 6, lines 9-11) Jaquette further discloses that the intensity "includes modulation based upon data as supplied by microprocessor 20, or other

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data handling circuits". (Jaquette, col. 6, lines 11-13)
This modulation appears to be for the purpose of writing one's
or zero's to a medium, and is not an adjustment of pulse
width. Applicants respectfully disagree that Jaquette's
5 analog intensity control signal is an "analog duration control
voltage". Variations in voltage in Jaquette's analog
intensity control signal control pulse intensity, not
duration.

Indeed, any measurement of "pulse duration" by Jaquette
10 is performed to calibrate the intensity of the recording beam,
and in fact, is not a measurement of actual pulse width or
duration, but a measurement of the time during which a pulse
exceeds a 50% threshold value 166. (See Jaquette, col. 11,
line 57 - col. 12, line 11, and FIG. 8) This is one of
15 several embodiments given in Jaquette to calibrate the
intensity of the recording beam. (See, e.g., col. 7, lines
11-25 and col. 11, lines 50-61, and col. 12)

FIG. 8 of Jaquette and the associated description clearly
indicate that the intensity control signal from the DAC 23
20 does **not** vary the **pulse duration** in accordance with a variable
voltage amount, but rather varies the **amplitude and the rise
and fall rates** of a pulse. Note that the beginning point 169
and end point 176 of the pulse shown in Jaquette FIG. 8 are
unchanged by different levels on the intensity control signal,
25 so the actual pulse width or duration is the same. Jaquette
discloses that "[t]he elapsed time between the leading and
trailing edges 170-71 and 174-5 at threshold line 166
indicates pulse length. Increasing the peak amplitude of the
pulse as shown by pulse 168 results in a greater length pulse
30 measured by the respective times that PWM threshold 179 is
crossed by readback PWM signal 167, as can be easily seen in
FIG. 8." (Col. 12, lines 9-14)

Clearly, Jaquette has established a particular definition

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of pulse length or duration, wherein the "length" consists of the elapsed time between the leading and trailing edges of a pulse at a threshold line, wherein the level of the threshold line is calculated as half of the sum of the baseline level and the maximum level. (Col. 12, lines 5-8) Applicants respectfully disagree that Jaquette's definition of pulse length or duration corresponds to the standard definition of pulse duration used by Applicants. For example, see Applicant's FIG. 3, wherein the duration of the laser intensity pulse decreases with a lower analog duration control voltage. It is not merely the rise and fall rates changing with the pulse duration remaining the same.

Again, Jaquette's analog signal from the DAC 23 controls pulse **intensity** or amplitude. Although this affects the rise and fall times of Jaquette's pulse, it does not affect actual pulse duration as the term is normally used. Therefore, Jaquette does not disclose or suggest an **analog duration control voltage having a variable voltage amount for varying the respective pulse duration of each substantially symmetrical pulse in accordance with the variable voltage amount.**

The dependent claims 2-11 and 13-15 depend ultimately upon independent claims 1 and 12 which are allowable over the cited art as discussed above. Because the dependent claims depend on allowable independent claims, they are likewise in condition for allowance. However, the dependent claims are independently allowable at least in that they recite particular features which, when combined with the elements of the independent claims, are not disclosed or suggested in the cited references.

In view of the above, all of the claims are believed to be in condition for allowance, and the Applicants respectfully

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request that a timely Notice of Allowance be issued.

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Respectfully submitted,
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